



National Symposium

on

Makhana

Unlocking India's Aquatic Superfood for Rural Prosperity



Date: 20-May-2025

Venue

Lemon Tree Premier

876, Exhibition Road, Near Gandhi Maidan

Patna, Bihar - 800001

Organized by

Bihar Agriculture Science Academy, RPCAU, Pusa, Bihar

Agricultural Economics Research Association (India), New Delhi

International Food Policy Research Institute, South Asia Office, New Delhi

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Background

Makhana, also known as foxnut or gorgon nut, is a nutrient-rich aquatic crop that is commercially cultivated almost exclusively in India, with Northern Bihar serving as its epicenter. With a cultivation history spanning over 2,000 years, makhana is gaining increasing global recognition for its exceptional nutritional composition—comprising 76.9% carbohydrates, 9.7% protein, and vital minerals. Approximately 85% of India's makhana is produced in Bihar's Darbhanga, Madhubani, Purnia, and Katihar districts, covering an estimated 15,000 hectares. The country produces around 120,000 metric tonnes (MT) of makhana seeds annually, which yield 40,000–50,000 MT of popped makhana. The sector generates revenues of nearly ₹ 600 crore at the trader level. However, export volumes remain modest, with only about 1% of production reaching international markets such as the USA, UK, Australia, and Gulf countries.

In recognition of its regional and nutritional uniqueness, the Government of India registered 'Mithila Makhana' as a Geographical Indication (GI) in 2022. Further, under the **One District One Product (ODOP)** initiative, six makhana-producing districts in Bihar have received targeted support. Most notably, the Union Budget 2025 announced the establishment of a **dedicated Makhana Board** in Bihar to streamline and enhance the makhana ecosystem—from production and processing to value addition and market access. With a projected domestic market expansion to ¹ 18.9 billion by 2032, these initiatives signify a strong governmental commitment to transforming the sector.

Key Challenges

Despite its high potential and recent policy support, the makhana sector continues to grapple with several structural and operational challenges:

- **Traditional Practices:** Cultivation and harvesting largely rely on age-old, labour-intensive methods, resulting in low productivity and high post-harvest losses.
- **Fragmented Value Chain:** The supply chain is largely unorganized and dominated by intermediaries. Farmers typically receive just 27–30% of the final consumer price due to a long marketing channel (Producer → Processor → Local Wholesaler → Distant Wholesaler → Retailer → Consumer).
- **Limited Market Access:** Farmers face constrained access to direct markets, which reduces their bargaining power and profitability.
- **Lack of Branding:** Absence of cohesive branding and consumer awareness limits both domestic market growth and export potential.
- **Inadequate Mechanization:** Low mechanization in harvesting and processing inflates production costs and restricts scalability.
- **Trade Barriers:** The absence of a dedicated HS code for makhana hampers export tracking, while limited awareness of international standards among smallholders restricts competitiveness in global markets.



Symposium Objectives

The **National Symposium on Makhana** aims to chart a strategic roadmap for unlocking the full economic and nutritional potential of this traditional crop. The overarching goal is to transform makhana into a globally recognized superfood while ensuring inclusive and sustainable development for farming communities.

The symposium will feature four thematic sessions:

1. Modern Production Practices

Focus on innovative cultivation technologies, agronomic research, and climate-resilient practices.

2. Processing and Value Addition

Emphasis on mechanization, processing innovations, nutritional profiling, and health benefits.

3. Marketing, Trade, and Branding

Discussion on international trade promotion, leveraging the GI tag, market intelligence, and consumer branding.

4. Panel Discussion: Lessons for the Makhana Board

Insights from successful commodity boards (e.g., Tea, Coffee, Spices, Coconut) to inform the development and governance framework of the newly formed Makhana Board.

Organizing Committee

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